

A METHOD AND APPARATUS FOR STARTING A GAS TURBINE USING
A POLYPHASE ELECTRIC POWER GENERATOR

ABSTRACT OF THE DISCLOSURE

A method to start a combined unit gas turbine and electrical unit having a static start drive including the steps of: applying a variable frequency voltage from the static start drive to a winding of the generator to accelerate the combined unit to a turbine self-sustaining speed; accelerating the combined unit beyond the self-sustaining speed by applying torque generated by the turbine, and as the combined unit accelerates to a synchronous speed, applying a braking torque from the static start drive to steady the combined unit at the synchronous speed.